

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION 5 CHICAGO REGIONAL LABORATORY

#### 536 SOUTH CLARK STREET

#### CHICAGO, ILLINOIS 60605

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12/5/2011

Subject:

Review of Region 5 Data for Blue Island Phenols

From:

Francis Awanya, Group Lead

Region 5 Chicago Regional Laboratory

To:

RCRA, LCD, US EPA Region 5

77 West Jackson Boulevard

Chicago, IL 60604

The data being transmitted under this cover memo successfully passed CRL's internal data review procedures as documented in our current Quality Management Plan (QMP) and appropriate Standard Operating Procedures (SOPs). Please be aware that CRL does not perform data validation which is based on your data quality objectives. This function must be performed independently of the laboratory generating the data.

Results in this report represent only the samples analyzed.

Please have the U.S. EPA Project Manager/Officer call the CRL Sample Coordinator at (312) 353-0375 for any comments or questions.

Sylvia Gruffin	DEC 0 6 2011
Data Management Coordinator and Date Received	
DEC 0.6 2011	
Date Transmitted:/	
ses included in this report:	

Page 1 of 4

Report Name: 1109008 FINAL Dec 06 11 1457



536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard Chicago IL, 60604 Project: Blue Island Phenols

Project Number: [none]
Project Manager: Mike Beedle

Reported: Dec-06-11 14:57

#### ANALYSIS CASE NARRATIVE

Phone (312)886-3682 Francis A. Awanya

#### General Information

This revised narrative is for the transmittal of flash point analysis results repeated at higher temperatures. The test was initially performed at a lower temperature resulting in no observed flash. This occurred because of the way 60 deg C and 140 deg F appeared in the standard operating procedure (SOP) used. Changes will be made so that deg F is used exclusively since it is the SOP test equipment temperature unit.

Upon receipt, the original sample was assigned laboratory number 1109008-07. The sample consists of an aqueous phase and oil phase. The aqueous phase was assigned laboratory number 1109008-08 and the oil phase was similarly assigned number 1109008-09. Flash point results are reported for each of the phase. Analysis performed on each phase was completed within the holding time. A flash was observed for the oily phase sample 1109008-09. No flash was observed for aqueous phase sample 1109008-08. Other pertinent information is provided in the final analysis report.

#### Sample Analysis and Results

The sample phases were analyzed for ignitability by flash point using CRL Standard Operating Procedure (CRL.SOP) AIG048 Revision No: 2.1 (Reference SW846 Method 1020A).

## Quality Control

All required quality control criteria for the laboratory, method, and system performance audits were evaluated and determined to be within the CRL's QC limits.

Signature Frans A. Avenue, Date 12/06/2011

FMB 12/06/2011



536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard

Chicago IL, 60604

Project: Blue Island Phenols

Project Number: [none]

Project Manager: Mike Beedle

Dec-06-11 14:57

Reported:

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BIP-7, 9008-07 aqueous phase	1109008-08	Water	Sep-13-11 11:17	Sep-13-11 15:11
BIP-7, 9008-07 oil phase	1109008-09	Soil	Sep-13-11 11:17	Sep-13-11 15:11

Ignitability, Flash Point, EPA 1020A (modified) US EPA Region 5 Chicago Regional Laboratory

BIP-7, 9008-07 aqueous phase (1109008-08) Water Sampled: Sep-13-11 11:17 Received: Sep-13-11 15:11

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Ignitability by Flashpoint	U	NF	1.00	1.00	Degrees F	1	B110023	Oct-27-11	Nov-03-11

BIP-7, 9008-07 oil phase (1109008-09) Soil Sampled: Sep-13-11 11:17 Received: Sep-13-11 15:11

		Flags /		* * * * * * * * * * * * * * * * * * * *	**	- I	-	
Analyte	Result	Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared Analyzed
Ignitability by Flashpoint	131		1.00	1.00	Degrees F	ŀ	B110023	Oct-27-11 Nov-03-11

Page 3 of 4

Report Name: 1109008 FINAL Dec 06 11 1457



536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard Chicago IL, 60604 Project: Blue Island Phenols

Project Number: [none]

Project Manager: Mike Beedle

Reported:

Dec-06-11 14:57

#### Notes and Definitions

NF

No Flash

U

Not Detected

NR

Not Reported

FAR 12/06/2011

Francis Awanya, Group Leader

Page 4 of 4

Report Name: 1109008 FINAL Dec 06 11 1457

# Items for Project Manager Review

Analysis	Analyte	Exception	
		Default Report (not modified)	
		VERSION 6.08:2014	
Ingnitability by flash point	(Water)	J-Flags used	
Ingnitability by flash point	(Water)	Result calculations based on MDL	
Ingnitability by flash point	(Water)	Special Units: (Degrees F)	
Ingnitability by flash point	Ignitability by Flashpoint	NF: No Flash	
Ingnitability by flash point		Soil batched as Water	
Ingnitability by flash point	Ignitability by Flashpoint	NF: No Flash	
	Ingnitability by flash point	Ingnitability by flash point (Water) Ingnitability by flash point (Water) Ingnitability by flash point (Water) Ingnitability by flash point Ignitability by Flashpoint Ingnitability by flash point	Default Report (not modified) VERSION 6.08:2014 Ingnitability by flash point (Water) Ingnitability by flash point Ignitability by Flashpoint Ingnitability by flash point

FAR MICHIANII



536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

#### WORK ORDER

Printed: 12/6/2011 3:29:33PM

1109008

US EPA Region 5 Chicago Regional Laboratory

Client: RCRA, LCD, US EPA Region 5

Project: Blue Island Phenols

Project Manager:

Angela Ockrassa

Project Number:

[none]

Report To:

Mike Beedle RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604 Phone: 3-7922 Fax: (312)353-4342

Date Due:

Oct-29-11 15:00 (45 day TAT)

Received By:

Robert Snyder

Date Received:

Sep-13-11 15:11

Logged In By:

Robert Snyder

Date Logged In:

Sep-14-11 09:06

Samples Received at: 15.2°C
Sample tags/labels
Seals Intact
Received on ice
Paperwork Included
Yes

Analysis	Due	TAT	Expires	Comments	
1109008-01 BIP-1 [Water] San	pled Sep-13-11 09	9:15 Cent	ral		
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 09:15	pH = 8, report non-TCLP analytes	
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 09:15	pH = 8, run only if total metals is high	
TCLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 09:15	pH = 8	
TCLP - SVOA by end-over-end rotato	r (Oct-29-11 12:00	45	Sep-20-11 09:15	pH = 8, report non-TCLP analytes	
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 09:15	pH = 8	
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 09:15	pH = 8	
Hardness by calc	Oct-29-11 12:00	45	Mar-11-12 09:15	pH = 8	
1109008-02 BIP-2 [Water] Sam	pled Sep-13-11 09	:21 Centi	·al		
TCLP - SVOA by end-over-end rotator	Oct-29-11 12:00	45	Sep-20-11 09:21	pH = 8, report non-TCLP analytes	
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 09:21	pH = 8	
Hardness by calc	Oct-29-11 12:00	45	Mar-11-12 09:21	pH = 8	
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 09:21	pH = 8, report non-TCLP analytes	
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 09:21	pH = 8, run only if total metals is high	
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 09:21	pH = 8	
TCLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 09:21	pH = 8	

Printed: 12/6/2011 3:29:33PM

#### 1109008

## US EPA Region 5 Chicago Regional Laboratory

Client: RCRA, LCD, US EPA Region 5 Project: Blue Island Phenols

Project Manager:

Angela Ockrassa

Project Number:

[none]

Analysis	Due	TAT	Expires	Comments
1109008-03 BIP-3 [Water] San	npled Sep-13-11 0	9:29 Cent	tral	
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 09:29	pH = 8
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 09:29	pH = 8, run only if total metals is high
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 09:29	pH = 8
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 09:29	pH = 8, report non-TCLP analytes
TCLP - SVOA by end-over-end rotate	or (Oct-29-11 12:00	45	Sep-20-11 09:29	pH = 8, report non-TCLP analytes
TCLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 09:29	pH = 8
Hardness by calc	Oct-29-11 12:00	45	Mar-11-12 09:29	pH = 8
1109008-04 BIP-4 [Water] San	pled Sep-13-11 10	:07 Cent	ral	
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 10:07	pH = 8
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 10:07	pH = 8, report non-TCLP analytes
TCLP - SVOA by end-over-end rotator	r (Oct-29-11 12:00	45	Sep-20-11 10:07	pH = 8, report non-TCLP analytes
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 10:07	pH = 8, run only if total metals is high
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 10:07	pH = 8
CLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 10:07	pH = 8,
109008-05 BIP-5 [Water] Sam	nled Sen-13-11 10	:18 Centr	ral	
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 10:18	pH = 8
CLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 10:18	pH = 8, report non-TCLP analytes
CLP Extraction	Oct-29-11 12:00	45	Sep-27-11 10:18	pH = 8
letals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 10:18	pH = 8, run only if total metals is high
CLP - SVOA by end-over-end rotator	Oct-29-11 12:00	45	Sep-20-11 10:18	pH = 8, report non-TCLP analytes
CLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 10:18	pH = 8
109008-06 BIP-6 [Soil] Sample	d Sep-13-11 10:28	Central		
VOA Expanded List	Oct-29-11 12:00	45	Sep-27-11 10:28	pH = 8
otal % Dry Solids 105C	Sep-23-11 12:00	10	Sep-20-11 10:28	•
109008-07 BIP-7 [Water] Samp	led Sep-13-11 11:	17 Centra	al	
	Oct-29-11 12:00	45	Sep-27-11 11:17	
	Oct-29-11 12:00	45	Mar-11-12 11:17	run only if total metals is high
	Oct-29-11 12:00	45	Sep-12-12 11:17	Tom only it total inclais is fligh
	Oct-29-11 12:00	45	Sep-27-11 11:17	
	Oct-29-11 12:00	45	Sep-27-11 11:17	report non-TCLP analytes
	Oct-29-11 12:00	45	Mar-11-12 11:17	reposition total analytics
CLP - SVOA by end-over-end rotator		45	Sep-20-11 11:17	report non-TCLP analytes

#### WORK ORDER

Printed: 12/6/2011 3:29:33PM

1109008

## US EPA Region 5 Chicago Regional Laboratory

Client: RCRA, LCD, US EPA Region 5

Project: Blue Island Phenols

Project Manager:

Angela Ockrassa

Project Number: [none]

Analysis	Due	TAT	Expires	Comments	
1109008-08 BIP-7, 9008-07 aque Central	ous phase [Water	r] Sample	ed Sep-13-11 11:17	*	
TCLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 11:17		
TCLP - SVOA by end-over-end rotator	Oct-29-11 12:00	45	Sep-20-11 11:17	report non-TCLP analytes	
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 11:17		
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 11:17		
Ingnitability by flash point	Oct-29-11 12:00	45	Sep-12-12 11:17		
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 11:17	run only if total metals is high	
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 11:17		
1109008-09 BIP-7, 9008-07 oil ph	ase [Soil] Sampl	ed Sep-13	3-11 11:17 Central		
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 11:17		
Metals full ICP (S)	Oct-29-11 12:00	45	Mar-11-12 11:17		
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 11:17		
TCLP - SVOA by end-over-end rotator	Oct-29-11 12:00	45	Sep-27-11 11:17		
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 11:17	run only if total metals is high	
Total % Dry Solids 105C	Oct-29-11 12:00	45	Sep-20-11 11:17		
Ingnitability by flash point	Oct-29-11 12:00	45	Sep-12-12 11:17		

Analysis groups included in this we	ork order
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Hardness by calc

Mg ICP (W) Ca ICP (W)

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## Analytical and Inorganic Group Data Review Checklist

Work ord	er #:	1109008.	Project:	Blue Island Ph	enols			
Analysis:		Ignitability by flash point	CRL SOP:	AIG048 Revis	AIG048 Revision No: 2.1			
Analyst			CHECK LIST		Revie	ewer		
YES	NO	Pac	ckage Overview		YES	NO		
V .		Raw Data Package Comple	ete?		X			
√		Results Reported Correctly	?		X			
√ .		Special Requests Done?			X			
1		Calculations Checked?			X			
NA	NA	Calibration not Exceeded?			NA	NA		
NA	NA	Field QC Checked?			NA	NA		
		Q	uality Control					
1		Holding Time Met?			X			
<b>√</b>		Preservation Correct?			X			
√.		Initial Instrument Performa	nce Checks Verifie	ed?	X			
<b>V</b>		Calibration Verification Ch	ecked?		X			
1		Matrix QC Checked?			X			
1		QCS Checked (If Applicable	le)?	H	X			
			Final Check					
1		Technical Review Done?			X			
1		Narrative Complete?	=		X			
Electronic	c Pathwa	ay:		7				
Not Applicab	le							
the review	er. The	this data package documented reviewer, by signing, verifies ce with the CRL Quality Mar	that this package i	s complete and s	supports the repo			
Analyst:		FAA	Data Reviewer:		8.3			
Date:		11/29/2011	Date:		2/1/201			

Analysis: Ignitability by Flash Point

Project: Blue Island Phenols

Analyst: Francis A. Awanya

Work Order# 1109008 Date: 11/29/2011

## ANALYSIS CASE NARRATIVE

Phone (312)886-3682

04/10k

#### General Information

This revised narrative is for the transmittal of flash point analysis results repeated at higher temperatures. The test was initially performed at a lower temperature resulting in no observed flash. This occurred because of the way 60 deg C and 140 deg F appeared in the standard operating procedure (SOP) used. Changes will be made so that deg F is used exclusively since it is the SOP test equipment temperature unit.

One water sample, collected for the Project, and received at the Chicago Regional Laboratory on 09/13/2011. Upon receipt, the original sample was assigned laboratory number 1109008-07. The sample consists of an aqueous phase and oil phase. The aqueous phase was assigned laboratory number 1109008-08 and the oil phase was similarly assigned number 1109008-09. Flash point results are reported for each of the phase. Analysis performed on each phase was completed within the holding time. A flash was observed for the oily phase sample 1109008-09. No flash was observed for aqueous phase sample 1109008-08. Other pertinent information is provided in the final analysis report.

#### Sample Analysis and Results

The sample phases were analyzed for ignitability by flash point using CRL Standard Operating Procedure (CRL.SOP) AIG048 Revision No: 2.1 (Reference SW846 Method 1020A).

#### Quality Control

All required	quality control	l criteria for the	: laboratory, me	thod, and system
performance audits	were evaluated	l and determine	d to be within the	he CRL's QC limits.

Signature	, Date
Dietaran	, Duit

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Date

Date

# PREPARATION BENCH SHEET

B110023

US EPA Region 5 Chicago Regional Laboratory

Printed: 11/3/2011 1:01:38PM

Matrix: Water				Prepared	using: A&I	Prepared using: A&I - General Preparation	paration			(No Sprrogate)
			Initial	Final			E	E.		(ane Source ovi)
Lab Number	Analysis	Prepared	(mL)	(mL)	Spike ID	Source ID	Spike	Spike   Surrogate	Client	Extraction Comments
1109008-08	Ingnitability by flash po Oct-27-11 00:00	Oct-27-11 00:00	2	2			SOAL-LINE CONTRACTOR SERVICES		RA LCD US FPA Regio	A A A A A A A A A A A A A A A A A A A
	T	Andread Market and the second control of the	August and the second s						rus bob, ob the A region	
T1090009-09	ingnitability by flash po Oct-2/-11 00:00	Oct-27-11 00:00	2	2		· · · · · · · · · · · · · · · · · · ·			RA, LCD, US EPA Region	menne of State on several state of the several stat
B110023-DUP1 QC		Oct-27-11 00:00	2	2		1100008-08				ASSERTING THE PROPERTY OF THE
מתות במממום				A CANONICAL STREET, ST	- Annual Control of the Control of t	The state of the s				
BITOUZ3-DUPZ QC		Oct-27-11 00:00	2	2		1109008-09				
B110023-SRM1 QC	QC	Oct-27-11 00:00	2	2	9010702					
B110023-SRM2 QC	QC .	Oct-27-11 00:00	2	2	9010702					

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Flash Point

Calculations

Date of Analysis: 11/03/2011 Analyst:FA

Version 2

To use template for calculations, copy sheet and paste to a another, blank Excel sheet Reviewed & Locked by AO on 07/27/11

Rename copied sheet and enter temperatures for calculations

Batch ID: B110023

(Deg. F) (mm Hg) 79 760 79 760
(mm Hg) 746 745
15
79.8

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Work Order: 1109008 Bench Sheet: B110023

Date: 11|03|2011

Analyst: FAA

Sample ID: SRM, LIMS # 9010702

Sample II	):	SRM.	LIMS	#	9	OI	0	10%	2

Temperature	Flash	Pressure
( °F)	(Y/N)	(mmHg)
65	N	
70	N	Mursi .
75	N	1 News)
76	N	10000
77	N	Name of the last o
78	N	-
79	Y	746
80	Y	Assess
81	y	-
85	Y	~
	-	1938
4 <sub>meteor</sub>	-	Som
2(29)	-	02.00
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	Signer.	n=

Sample ID:	1109008-09
Priliminary -	

Temperature	Flash	Pressure
( °F)	(Y/N)	(mmHg)
132	Y	wyseemp.
99	N_	County
109	N	
116	N	lang
119	N	
122	N	(camp)
126	N	Songe
128	N	- Second
129	Y	745
	A SHAPE	<b>—</b>
-	Campo	bear.
-	*****	-
(20 <sup>10</sup>	-	-
	long.	
(45)	- Name	-
Tuberto:	(KDT/M)	
-		-
	-	_

Temperature	Flash	Pressure
( °F)	(Y/N)	(mmHg)
75	N	CAN STORY
קר	N	1000
78	N	
79	Y	745
84	Ý	
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Nagari .	, may	-
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-		-
	_ comp	
-		Marian

# Sample ID: 1109008-09 Finite Flash Point -

Temperature	Flash	Pressure
(°F)	(Y/N)	(mmHg)
125	N	6, nilling
126	N	-
127	N	-
128	N	
129	Y	745
130	Y	47-49
131	Y	_
	tue.	- 20000
~		Tour
-	<del></del>	
_	(cre-)	45.5
	te e.,	· · · · · · · · · · · · · · · · · · ·
~	1961	Seear 21
(American)	weeky.	gette.
	144	4(64)
<b>P</b>	**	
<u> </u>		(48-5)
weeks.	Sept.	

Date: 11/03/201	1
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Analyst: FAA

Sample ID: <u>B110023-DUP2</u>, Finite Flash Point -

Temperature	Flash	Pressure
(°F)	(Y/N)	(mmHg)
1277	(17/1)	(illimity)
121		
128		Tibelini Tibelini
129		745
130	e tabaj	ancom)
131	CANAL W	(LINEXY)
t	Number 2	
	3****	
-	-	
	Comp	
Administra	-1	-
-	-	-
comp	-	-area
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_	No.	-
Maria.	- Calabo	Control N
+dresp	and and	
-	1.00mg	

Sample ID: 110900 8-08

Temperature	Flash	Pressure
( °F)	(Y/N)	(mmHg)
129	N	- Comp
135	N	
139	N	· Create
140	N	-
145	N	(Canal)
-	-	Bong
	- Annual Control	
-	_	
Codes .	-	-
Comp	1	-
-		_
-		
-	-	Series .
	-	* Capper
-	- Sample	-
- camp	-	Pig
~~~	-	10.7
-	- Comp	MAS.
	*****	1,000
(finite)	,,,,,,,	1786

Flash Y/N)		ssure mHg)
- 11/3	201	
- 11/3	3 201	
- 11/3	3 201	
11/3	3 201	1
11/3	1201	1
11/3	1201	
11/2		
7,-0,-0		
	-	
	-	

Sample ID: 1109008-08

Priliminary -		
Temperature	Flash	Pressure
(.°F)	(Y/N)	(mmHg)
130	N	to make
135	N	-
140	N	The Colons
145	N	Name :
50		Circle .
		-
-		<u>∨=-,</u>
-		Throwing .
	-	Secretaire
	Norme.	_
	toway	-
-	Stateg	Comment
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e=0	HOME:	-
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Flashpoint by AIG048	
Continuation from previous pa	age

/	
Flash (Y/N)	Pressure (mmHg)
_/	
/	
FAA	11 03 2011
1	
	(Y/N)

Sample ID.		
Priliminary -		
Temperature	Flash	Pressure
( °F)	(Y/N) /	(mmHg)
	. /	
	/	
At a T		
NOT	/	
USED,	FAOT	11/03/201
	17/10	11031=1
/		
/		

Date:	03	12011
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Analyst: FAA

Temperature	Flash	Pressure
( °F)	(Y/N)	(mmHg)
135	N	- Chamming
140	N	-
145	N	_
-	-	_
~	~	-
~	_	~
transp .	_	
- Anna	~	
~	aProx.	
~	-	Same
	_	
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Flashpoint by AIG048	Date:		Analyst	
Continuation from previous page				1
Sample ID:	S	ample ID:		
Priliminary -		inite Flash I	Point -	
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# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **REGION 5 CHICAGO REGIONAL LABORATORY** 536 SOUTH CLARK STREET **CHICAGO, ILLINOIS 60605**

Date:

10/28/2011

Subject:

Review of Region 5 Data for Blue Island Phenols

From:

Francis Awanya, Group Lead FAA

Region 5 Chicago Regional Laboratory

To:

RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard

Chicago, IL 60604

The data being transmitted under this cover memo successfully passed CRL's internal data review procedures as documented in our current Quality Management Plan (QMP) and appropriate Standard Operating Procedures (SOPs). Please be aware that CRL does not perform data validation which is based on your data quality objectives. This function must be performed independently of the laboratory generating the data.

Results in this report represent only the samples analyzed.

Please have the U.S. EPA Project Manager/Officer call the CRL Sample Coordinator at (312) 353-0375 for any comments or questions.

Attached are Results for: Blue Island Phenols		
Lybuin Greffin	OCT 28 2911	
Data Management Coordinator and Date Received		
OCT 28 2011		
Date Transmitted:/		
Analyses included in this report:		
Analyses included in this report:  Ingnitability by flash point		

Page 1 of 4

Report Name: 1109008 FINAL Oct 28 11 1125



536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard Chicago IL, 60604 Project: Blue Island Phenols

Project Number: [none]
Project Manager: Mike Beedle

**Reported:** Oct-28-11 11:25

#### ANALYSIS CASE NARRATIVE

Phone (312)886-3682 Francis A. Awanya

#### General Information

One water sample collected for the Project was received at the Chicago Regional Laboratory for ignitability by flash point analysis on 09/13/2011. Upon receipt, the original sample was assigned laboratory number 1109008-07. The sample consists of an aqueous phase and oil phase. The aqueous phase was assigned laboratory number 1109008-08 and the oil phase was similarly assigned number 1109008-09. Flash point results are reported for each of the phase. Analysis performed on each phase was completed within the holding time. No flash was observed for either of the phases. Other pertinent information is provided in the final analysis report.

#### Sample Analysis and Results

The sample phases were analyzed for ignitability by flash point using CRL Standard Operating Procedure (CRL.SOP) AIG048 Revision No: 02 (Reference SW846 Method 1020A).

#### **Quality Control**

All required quality control criteria for the laboratory, method, and system performance audits were evaluated and determined to be within the CRL's QC limits.

Signature	Frams	A.	Avengo	, Date	10/28/2011
-			71-	*	



Chicago IL, 60604

# **Environmental Protection Agency Region 5 Chicago Regional Laboratory**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard

Project: Blue Island Phenols

Project Number: [none] Project Manager: Mike Beedle

Reported: Oct-28-11 11:25

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BIP-7, 9008-07 aqueous phase	1109008-08	Water	Sep-13-11 11:17	Sep-13-11 15:11
BIP-7, 9008-07 oil phase	1109008-09	Soil	Sep-13-11 11:17	Sep-13-11 15:11

## Ignitability, Flash Point, EPA 1020A (modified) US EPA Region 5 Chicago Regional Laboratory

BIP-7, 9008-07 aqueous phase (1109008-08) Water Sampled: Sep-13-11 11:17 Received: Sep-13-11 15:11

		Flags /						
Analyte	Result	Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared Analyzed
Ignitability by Flashpoint	U	NF	1.00	1.00	Degrees F	1	B110023	Oct-27-11 Oct-27-11

#### BIP-7, 9008-07 oil phase (1109008-09) Soll Sampled: Sep-13-11 11:17 Received: Sep-13-11 15:11

	,	Flags /							
Analyte	Result	Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared Analyzed	Ì
Ignitability by Flashpoint	U	NF	1.00	1.00	Degrees F	1	B110023	Oct-27-11 Oct-27-11	

Page 3 of 4

Report Name: 1109008 FINAL Oct 28 11 1125



536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard Chicago IL, 60604 Project: Blue Island Phenols

Project Number: [none]
Project Manager: Mike Beedle

Reported:

Oct-28-11 11:25

#### **Notes and Definitions**

NF

No Flash

U

Not Detected

NR

Not Reported

FAA 10/28/2011

Page 4 of 4

Report Name: 1109008 FINAL Oct 28 11 1125

## Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Default Report (not modified)
			VERSION 6.08:2014
	Ingnitability by flash point	(Water)	J-Flags used
	Ingnitability by flash point	(Water)	Result calculations based on MDL
	Ingnitability by flash point	(Water)	Special Units: (Degrees F)
1109008-08	Ingnitability by flash point	Ignitability by Flashpoint	NF: No Flash
1109008-09	Ingnitability by flash point		Soil batched as Water
1109008-09	Ingnitability by flash point	lgnitability by Flashpoint	NF: No Flash
B110023-DUP1	Ingnitability by flash point	lgnitability by Flashpoint	NF: No Flash
B110023-DUP2	Ingnitability by flash point	Ignitability by Flashpoint	NF: No Flash

Sample, Log and Extraction Comments

Analysis: Ignitability by Flash Point

Analyst: Francis A. Awanya

**Project**: Blue Island Phenols

Work Order# 1109008 Date: 10/27/2011

#### ANALYSIS CASE NARRATIVE

Phone (312)886-3682

#### **General Information**

One water sample collected for the Project was received at the Chicago Regional Laboratory for ignitability by flash point analysis on 09/13/2011. Upon receipt, the original sample was assigned laboratory number 1109008-07. The sample consists of an aqueous phase and oil phase. The aqueous phase was assigned laboratory number 1109008-08 and the oil phase was similarly assigned number 1109008-09. Flash point results are reported for each of the phase. Analysis performed on each phase was completed within the holding time. No flash was observed for either of the phases. Other pertinent information is provided in the final analysis report.

#### Sample Analysis and Results

The sample phases were analyzed for ignitability by flash point using CRL Standard Operating Procedure (CRL.SOP) AIG048 Revision No: 02 (Reference SW846 Method 1020A).

#### **Quality Control**

All required quality control criteria for the laboratory, method, and system performance audits were evaluated and determined to be within the CRL's QC limits.

Signature Frem A. Awaya, Date 10/27/2011

Date

Extracts Received By

Date

PREPARATION BENCH SHEET
B110023

US EPA Region 5 Chicago Regional Laboratory

Printed: 10/27/2011 2:44:55PM

Matrix: Water	7			Prepared	using: A&I	Prepared using: A&I - General Preparation	paration			(No Surrogate)
Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Client	Extraction Commands
							-	0		Exalgements
1109008-08	Ingnitability by flash po Oct-27-11 00:00	Oct-27-11 00:00	2	2		-			RA, LCD, US EPA Regio	
1109008-09	Ingnitability by flash po Oct-27-11 00:00	Oct-27-11 00:00	2	2					RA, LCD, US EPA Region	
חווסססס הויים									1 0 to the execution	
BITUUZ3-DUPT QC	QC	Oct-27-11 00:00	2	2		1109008-08				
B110023-DUP2 QC	QC	Oct-27-11 00:00	2	2		1109008-09				
B110023-SRM1 QC	QC	Oct-27-11 00:00	2	2	9010702					
JOCMAS-£200118		Oct 27 11 00:00	,	,	201020					
			1	_	2010/02					

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Flash Point Calculations

Version 2

Reviewed & Locked by AO on 07/27/11

To use template for calculations, copy sheet and paste to a another, blank Excel sheet

Analyst:FA Date of Analysis: 10/27/2011

Batch ID:

B110023

Rename copied sheet and enter temperatures for calculations

_			٠,	 				
	2							Count
LIWS# 9010702	LIMS# 9010702	LIMS# 9010702					I.D Number	CRL Sample
	80	80		,	(Deg. F)	Found	erature	Flash Point Standard
	760	760			(mm Hg)	Pressure (SBP)	Barometric	Standard
	746.0	746.0			(mm Hg)	Recorded(BPR)	Pressure	Barometric
Mean = 80.8	14	14			(mm Hg)	Pressure (SBP)  Recorded(BPR)  Differences (BPD) Temperature	Pressure	Barometric
30.8	80.8	80.8			(Deg. F)	Temperature	Flash Point	BP Corrected

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Work Order: 1109008 Bench Sheet: 8110023

Date: 10|27|2011

Analyst: FAA

Sample ID: SRM, LIMS # 9010702

Sample ID: SRM, LIMS # 9010702

Temperature	Flash	Pressure
( °F)	(Y/N)	(mmHg)
60	N	
69	$N_{\perp}$	
90	Ν	
32	<b>Y</b>	746
89		
78	N	
79	7	
80	y	746
3)	Y	
82	У	
		·····

Temperature	Flash	Pressure
( °F)	(Y/N)	(mmHg)
77	N	
78	N	
74	<u> </u>	4*
30	Y	746
81	<u> </u>	
82	<u> </u>	
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Sample ID: 1109008-07 (oily Phase) Sample ID: 1109008-07 (oily phase) Finite Flash Point-

PHASE DA 1109008-08-08-141111

	-minimary -						
i	Temperature	Flash	Pressure				
	( °F)	(Y/N)	(mmHg)				
	58	N					
	5 g 6 G	7					
	75	Ν					
	<u>50</u> 55	N_					
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		3					

ا توا	Tarana Taran		D
· \$	Temperature	Flash	Pressure
1/2	( °F)	(Y/N)	(mmHg)
$\tilde{Q}_{N}$	50	N	
्र	54	N	
3	60	N	
2	65	N	
10	73	<u> </u>	
PHASEIDH 110908-08-	İ		
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51		<u> </u>	
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Flashpoint by AlG048	10/2* Date: <del>FAA</del>	7 2-01  Analyst:	FAA 10 27 20	<del>/</del>
Sample ID: B110023-DUP1	Sample	ID: <u>BIIOD23-1</u>	Dupl (Oily	Phase)
Priliminary -  Temperature Flash Pressure  ( °F) (Y/N) (mmHg)	Tempera (°F)	1	Pressure (mmHg)	PHASE ID# 9
	60 65 70	N		1109008-08
				10 27  i <sub>i</sub>
		4.50.00	(1)	1 h a ca \
Sample ID: 1109008-07 (Aqua Priliminary - f	Tempera		Pressure	
(°F) (Y/N) (mmHg) 55 N 63 N 72 N	50 50 65 65	N N	(mmHg)	- · · · · · · · · · · · · · · · · · · ·
	8 65	N N		
	011 #OL 584H			
	SOM			

## Flashpoint by AIG048 Continuation from previous page

Date: 10 27 2011 Analyst: FAA

Sample ID:		<u>, , , , , , , , , , , , , , , , , , , </u>
Priliminary -		/
Temperature	Flash /	Pressure
( °F)_	(Y/N)/	(mmHg)
	/	
	/	
/		

Sample ID:	B110023-D	UPI (Aqueous	Phone
Finite Flash	Point -	V	

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Temperature	Flash	Pressure
( °F)	(Y/N)	(mmHg)
50 55	N	
55	N	
60	N	
65	<u>N</u>	
70	N	
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PAIATE ID # 1109008-08

Prilli	ninary	-

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Temperature	Flash	Pressure
(°F)	(Y/N)	(mmHg)
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Sample	ID:	

Finite Flash Point Temperature Flash Pressure (°F) (Y/N) (mmHg)

Flashpoint by A	IG048		Date:		Analyst:	
Continuation from		e				
Sample ID:				Sample ID:		
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## Analytical and Inorganic Group Data Review Checklist

Work order #: 1109008 Project: Blue		Blue Island Pheno	ols		
Analysis:		Ignitability by flash point CRL SOP:	AIG048 Revision	1 No: 02	
Analyst		CHECK LIST		Reviewer	
YES	NO	Package Overvie	W	YES	NO
√		Raw Data Package Complete?		1 4	
<b>V</b>		Results Reported Correctly?		X	
√		Special Requests Done?		×	
1		Calculations Checked?		X	
NA	NA	Calibration not Exceeded?		NA	NA
NA	NA	Field QC Checked?		NA	NA
		Quality Contro	1		
- V		Holding Time Met?		T X T	
<b>√</b>		Preservation Correct?		×	
√		Initial Instrument Performance Checks Ve	erified?	X	
√		Calibration Verification Checked?		X	
<b>√</b>		Matrix QC Checked?		×	
<b>√</b>		QCS Checked (If Applicable)?		*	
		Final Check			
<b>√</b>		Technical Review Done?		X	
V		Narrative Complete?			
Electroni		ay:		,	
Not Applical	ole				
		this data package documented (by the review	,		
		reviewer, by signing, verifies that this pack			orted
procedure		ce with the CRL Quality Management Plan .	and applicable standard	a operating	
	`/				
Analyst:		FAA Data Reviewe	er: E	-8-	
Date:		10 27 2011 Date:	10	1/27/20	<i>l (</i>

Analysis: Ignitability by Flash Point

Analyst: Francis A. Awanya

**Project**: Blue Island Phenols

Work Order# 1109008 Date: 10/27/2011

## ANALYSIS CASE NARRATIVE

Phone (312)886-3682

# OF 1/80 28 - 2011

## **General Information**

One water sample collected for the Project was received at the Chicago Regional Laboratory for ignitability by flash point analysis on 09/13/2011. Upon receipt, the original sample was assigned laboratory number 1109008-07. The sample consists of an aqueous phase and oil phase. The aqueous phase was assigned laboratory number 1109008-08 and the oil phase was similarly assigned number 1109008-09. Flash point results are reported for each of the phase. Analysis performed on each phase was completed within the holding time. No flash was observed for either of the phases. Other pertinent information is provided in the final analysis report.

## Sample Analysis and Results

The sample phases were analyzed for ignitability by flash point using CRL Standard Operating Procedure (CRL.SOP) AIG048 Revision No: 02 (Reference SW846 Method 1020A).

## **Quality Control**

All required quality control criteria for the laboratory, method, and system	
performance audits were evaluated and determined to be within the CRL's QC limits	3.

Signature	_, Date



## **Environmental Protection Agency Region 5**

# **Chicago Regional Laboratory**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

### WORK ORDER

Printed: 10/27/2011 2:04:42PM

## 1109008

US EPA Region 5 Chicago Regional Laboratory

Client: RCRA, LCD, US EPA Region 5

**Project: Blue Island Phenols** 

Project Manager:

Angela Ockrassa

Project Number:

[none]

Report To:

Mike Beedle

RCRA, LCD, US EPA Region 5

77 West Jackson Boulevard

Chicago, IL 60604

Phone: 3-7922

Fax: (312)353-4342

Date Due:

Oct-29-11 15:00 (45 day TAT)

Received By:

Robert Snyder

Date Received:

Sep-13-11 15:11

Logged In By:

Robert Snyder

Date Logged In:

Sep-14-11 09:06

Samples Received at:

Sample tags/labels

15.2°C Yes

Seals Intact Received on ice

Yes Yes

Paperwork Included

Yes

Analysis	Due	TAT	Expires	Comments
1109008-01 BIP-1 [Water] Sa	ampled Sep-13-11 09	:15 Centi	ral	
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 09:15	pH = 8, report non-TCLP analytes
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 09:15	pH = 8, run only if total metals is high
TCLP - SVOA by end-over-end rota	ator (Oct-29-11 12:00	45	Sep-20-11 09:15	pH = 8, report non-TCLP analytes
TCLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 09:15	pH = 8
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 09:15	pH = 8
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 09:15	pH = 8
Hardness by calc	Oct-29-11 12:00	45	Mar-11-12 09:15	pH = 8
1109008-02 BIP-2 [Water] Sa	ampled Sep-13-11 09	:21 Centi	ral	
TCLP - SVOA by end-over-end rota	ator (Oct-29-11 12:00	45	Sep-20-11 09:21	pH = 8, report non-TCLP analytes
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 09:21	pH = 8
Hardness by calc	Oct-29-11 12:00	45	Mar-11-12 09:21	pH = 8
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 09:21	pH = 8, report non-TCLP analytes
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 09:21	pH = 8, run only if total metals is high
TCLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 09:21	pH = 8
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 09;21	pH = 8

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Printed: 10/27/2011 2:04:42PM

## 1109008

## US EPA Region 5 Chicago Regional Laboratory

Client: RCRA, LCD, US EPA Region 5

Project: Blue Island Phenols

Project Manager: Project Number:

Angela Ockrassa

[none]

Analysis	Due	TAT	Expires	Comments		
1109008-03 BIP-3 [Water] Sampled Sep-13-11 09:29 Central						
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 09:29	pH = 8		
TCLP - SVOA by end-over-end ro	otator (Oct-29-I1 12:00	45	Sep-20-11 09:29	pH = 8, report non-TCLP analytes		
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 09;29	pH = 8, run only if total metals is high		
TCLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 09:29	pH = 8		
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 09:29	pH = 8		
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 09:29	pH = 8, report non-TCLP analytes		
Hardness by cale	Oct-29-11 12:00	45	Mar-11-12 09:29	pH = 8		
1109008-04 BIP-4 [Water]	Sampled Sep-13-11 10	:07 Centi	ral			
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 10:07	pH = 8		
TCLP - SVOA by end-over-end re	otator (Oct-29-11 12:00	45	Sep-20-11 10:07	pH = 8, report non-TCLP analytes		
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 10:07	pH = 8, run only if total metals is high		
TCLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 10:07	pH = 8,		
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 10:07	pH = 8, report non-TCLP analytes		
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 10:07	pH = 8		
1109008-05 BIP-5 [Water] Sampled Sep-13-11 10:18 Central						
TCLP - SVOA by end-over-end re	otator (Oct-29-11 12:00	45	Sep-20-11 10:18	pH = 8, report non-TCLP analytes		
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 10:18	pH = 8, run only if total metals is high		
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 10:18	pH = 8		
TCLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 10:18	pH = 8		
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 10:18	pH = 8		
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 10:18	pH = 8, report non-TCLP analytes		
1109008-06 BIP-6 [Soil] Sa	mpled Sep-13-11 10:2	8 Central	· · · · · · · · · · · · · · · · · · ·			
SVOA Expanded List	Oct-29-11 12:00	45	Sep-27-11 10:28	pH = 8		
Total % Dry Solids 105C	Sep-23-11 12:00	10	Sep-20-11 10:28			
1109008-07 BIP-7 [Water] Sampled Sep-13-11 11:17 Central						
TCLP - SVOA by end-over-end re	otator (Oct-29-11 12:00	45	Sep-20-11 11:17	report non-TCLP analytes		
Ingnitability by flash point	Oct-29-11 12:00	45	Sep-12-12 11:17			
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 11:17	run only if total metals is high		
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 11:17			
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-1111:17	report non-TCLP analytes		
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 11:17			
TCLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 11:17			

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## WORK ORDER

## 1109008

Printed: 10/27/2011 2:04:42PM

## US EPA Region 5 Chicago Regional Laboratory

Client: RCRA, LCD, US EPA Region 5

**Project: Blue Island Phenols** 

Project Manager:

Angela Ockrassa

Project Number: [none]

Analysis	Due	TAT	Expires	Comments
1109008-08 BIP-7, 9008-07 ac Central	queous phase [Water	] Sample	ed Sep-13-11 11:17	
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-11 11:17	•
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 11:17	
Metals full ICP (W)	Oct-29-11 12:00	45	Mar-11-12 11:17	
TCLP/ZHE Extraction	Oct-29-11 12:00	45	Sep-27-11 11:17	
Ingnitability by flash point	Oct-29-11 12:00	45	Sep-12-12 11:17	
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 11:17	run only if total metals is high
TCLP - SVOA by end-over-end rot	ator (Oct-29-11 12:00	45	Sep-20-1111:17	report non-TCLP analytes
1109008-09 BIP-7, 9008-07 o	il phase [Soil] Samp	led Sep-1.	3-11 11:17 Central	
Total % Dry Solids 105C	Oct-29-11 12:00	45	Sep-20-11 11:17	
TCLP - SVOA by end-over-end ro	tator (Oct-29-11 12:00	45	Sep-27-11 11:17	
TCLP/ZHE VOLATILES	Oct-29-11 12:00	45	Sep-27-1[11:17	
Metals full ICP (S)	Oct-29-11 12:00	45	Mar-11-12 11:17	
Metals, TCLP ICP (w/o Hg)	Oct-29-11 12:00	45	Mar-11-12 11:17	run only if total metals is high
TCLP Extraction	Oct-29-11 12:00	45	Sep-27-11 11:17	*
Ingnitability by flash point	Oct-29-11 12:00	45	Sep-12-12 11:17	·

Analysis groups incl	uded in this work order	·
<u>Hardness by calc</u>		
Mg ICP (W)	Ca ICP (W)	3311

Reviewed By

Date

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